

# THE SWITCH 4 Switcher



The **Switch 4** Decodes USITT DMX-512/1990 protocol to a bank of 4 channels with the start channel (channel 1 on the Switch 4) being selected by front panel switches.

The four outputs are relay switched and in normal operation (when dip switch 1 is set off) will switch on when the received DMX level is above 50% and switch off when this level is below 39%.

In the single channel mode (when dip switch 1 is set on) the channel being selected by the front panel switches is used to decode all four relay switches, channel 1 switching on @ 25%, channel 2 switching on @ 45%, channel 3 switching on @ 65%, and channel 4 switching on @ 85%. Each channel will remain on until it's on level is reduced by 10%.

A LED display on the front panel provides the user with a visual reference to the state of each channel and when connected to a valid DMX-512 source.

The **Switch 4** is rated for a total load of 3.6 kW.

The total load per channel MUST NOT EXCEED 2.5 kW.

The **Switch 4** will, "Last Hold" if DMX control signal is lost.

Should the DMX cable become disconnected or the control console stop transmitting, the Switch 4 will continue to output the last received information until switched off.

When reconnected to a working DMX source, the outputs will be updated.

If mains power to the Switch 4 is interrupted, all outputs will be off when turned on again.

Always all off if front panel switches set to "000".

The **Switch 4** incorporates a Test mode. This is enabled by dip switch 2 set on.

In this mode the internal controller is used to drive the relays.

It is accessed by setting the start address switches between 901 to 915.

No DMX control is necessary, but a control signal may be left connected.

The **Switch 4** case is styled in strong steel, finished in black powdercoat with a white printed control panel. Lips on the front and rear of the case protect the connectors from damage during transportation and use.

## CONTROLS & CONNECTIONS

### ***DMX Input & Output***

XLR 5 pin plug and socket. Input is not electrically isolated from the output BUT IS isolated from all internal circuitry and mains earth. Accepts industry standard USITT DMX-512/1990 protocol. Incoming DMX-512 data frames are checked for framing errors, invalid Start Codes and noise. All specifications meet or exceed DMX-512 requirements.

### ***DMX OK Led***

Orange LED will be lit when receiving valid DMX-512 data frames.

### ***System Run Led***

Red LED will flash when the **Switch 4** is powered up and running correctly.

### ***Channel Leds***

Green LEDs provide visual reference of the current output of each channel.

### ***Offset Code Switches***

Used to select a bank of 4 control channels with the start channel being selected with these switches. Valid settings 001 to 512. Selecting 000 will set all outputs to off. Selecting 901 to 915 to test outputs, all other settings will set all outputs to off.

### ***Outputs***

The unit is equipped with four 10 Amp output sockets on the rear of the unit.

### ***Internal controls***

Mounted on the printed circuit board inside the **Switch 4** case are two switches.

The two switches are used to set the user and test mode.

Switch 1 ON = Single channel mode.

Switch 1 OFF = Normal mode.

Switch 2 ON = Test mode enabled.

Switch 2 OFF = Test mode disabled.

NOTE: The **Switch 4** must be disconnected from the power supply (plug removed) before removing cover. The internal controls should always be adjusted with the power supply disconnected and only reconnect the supply once the cover has been replaced. There are dangerous high voltages inside the unit.

## SPECIFICATIONS

### ***Input***

Power :230VAC 50Hz 15Amp

Connector :Tapon plug, 1.8m flex

### ***Output***

:2.5kW Max / Per Channel

Total Load :15 Amps

Connectors :PDL 570S

Fuse :15 Amp

### ***Controls***

Power Switch :PDL 580M16N

Start address : Hartmann Code Switch

### ***Dimensions***

Height :75mm

Width :285mm

Depth :230mm

The **Switch 4** is manufactured In Napier, New Zealand by Lockyer Electronics.



For further details contact

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Available from